



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

has been able to secure more favorable material for study and has just published³⁰ his results. The genus belongs to the Taxodineae, and resembles *Cunninghamia* in the form of its cones, *Arthrotaxis* in its foliage, and *Cryptomeria* in its habit. A study of the anatomy of the leaf shows that in this feature it is intermediate between *Cunninghamia* and *Cryptomeria*, and perhaps nearest to *Arthrotaxis*. On the whole, the author concludes that it should be placed among Taxodineae between *Cunninghamia* and *Arthrotaxis*.—J. M. C.

Synopsis of Godetia.—W. L. JEPSON³¹ has published a synopsis of the North American species of *Godetia*, which are restricted to the Pacific coast and are represented chiefly in California. After some account of the history of the genus, early type specimens, concept of "species" in the genus, geographic distribution, and hybrids, the 17 recognized species are presented in two groups: the *Amoena* group, comprising the loosely flowered, freely branching forms; and the *Purpurea* group, comprising the spicately flowered, simple stemmed forms. The critical character of the study may be suggested by the statement that there are published 5 new species, 15 new varieties, 6 new forms, and 3 new combinations. The "little-known species, old and recent," number 11.—J. M. C.

Nitrogen fixation by algae.—After a valuable review of the literature of the subject, HEINZE³² gives an account of his investigation of the fixation of free nitrogen by algae. He had found earlier that fungi, apart from bacteria, do not possess this power. In this paper it is shown that some algae, *Nostoc* for example, possess this power to some degree; quantitatively the work of algae in this way is not very important. A much greater rôle is suggested by their symbiotic life with such nitrifying organisms as *Azotobacter*; the work of the latter is doubtless facilitated largely by the carbohydrate contributions of the algal symbionts.—H. C. COWLES.

Anatomy of Equisetum.—QUÉVA'S³³ studies on the histology of *Equisetum* lead him to the conclusion that secondary growth does not exist even in the nodes, where there is some appearance of cambial activity. Since secondary wood was common in the Calamites, and JEFFREY has observed a cambium in the cone of *E. hiemale* and *E. limosum*, it is probable that we have here to do with a vestigial structure. The cortex arises by tangential divisions of a superficial layer of cells. Differentiation of the xylem is exclusively in the centrifugal direction, and the protoxylem usually disappears owing to rapid elongation of the stem.—M. A. CHRYSLER.

³⁰ HAYATA, B., On *Taiwania* and its affinity to other genera. Bot. Mag. Tokyo 21: 21-27. pl. 1. 1907.

³¹ JEPSON, W. L., A synopsis of the North American *Godetias*. Univ. Calif. Publ. Bot. 2: 319-354. pl. 29. 1907.

³² HEINZE, B., Einige Beiträge zur mikrobiologischen Bodenkunde. Cent. Bakt. 16: 640-653, 703-711. 1906.

³³ QUÉVA, C., Histogénèse et structure de stipe et de la fronde des *Equisetum*. Mem. Soc. Hist. Nat. d'Autun 20: 4-41. 1907.